



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,064	09/06/2001	Eckhardt Belgardt	112740-220	3672
29177	7590	01/26/2005	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			LE, VIET Q	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/856,064	<b>Applicant(s)</b> BELGARDT ET AL.	
	<b>Examiner</b> Viet Q. Le	<b>Art Unit</b> 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 6-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/17/1999</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed on 11/17/1999 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Document number 0503284 submitted in the IDS is not considered because it is not in the English language.

### ***Specification***

2. The disclosure is objected to because of the following informalities:
- a. There is no explanation of what the RPC (cited on page 5, line 2) stand for in the specification.
  - b. There is no port "10" in the figure as cited on page 5, line 11-12 of the specification.
  - c. There are no labels for "Z0 and Z1 in the figure as cited on page 5, line 21 of the specification.

- d. Title of the application shall not be appearing in the specification section.  
Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolfgang Fischer et al. (8272 IEEE Journal on selected areas in communications. 9(1991) October No 8, New York, US), hereinafter referred to as Fischer.

Regarding claim 6, Fischer disclosed a method for extending a switching matrix, which is in redundant form, of a communication system without interruption (Parallel units including redundant units and primary units are set up in parallel. Second stage of the network will be equipped with modules according to the planned maximum configuration of the switching system See page 1303, column 2, paragraph 1; See page 1304, column 1, paragraph 4; See page 1305, column 1, paragraph 4; column 2, paragraph 1-2), the switching matrix having a plurality of switching matrix assemblies via which a plurality of cell streams having ATM cells are routed as stipulated by a routing address placed in front of a cell header (See page 1301, column 1, paragraph 3; See page 1303, column 1, paragraph 5; See page 1305, column 2, paragraph 5), the

Art Unit: 2667

routing address taking up a prescribed memory space requirement (See page 1303, column 1, paragraph 1), the method comprising the steps of: reserving additional memory space for storing the routing address of a largest required switching matrix extension both in a header translation table and in the cell header of each ATM cell by placing at least one zero in front of the routing address (Fischer stated that the second stage when used for upgrade need to be used in according with the maximum planned configuration of the switching system. With a bigger and larger matrix size in the second stage, there will be more connections going through the matrix and ultimately required larger memory space as indicated by Fischer on page 1303, column 1, and paragraph 1. See also page 1305, column 2, paragraph 1); performing a system split which is used to replace old switching matrix assemblies with new switching matrix assemblies in steps (See page 1305, column 2, lines 21-37), addressing, in the new switching matrix assemblies and insofar as the new switching matrix assemblies connect paths to a same output as the old switching matrix assemblies, the paths using the same routing addresses (See page 1305, column 1, paragraph 4); and writing the new routing addresses for the paths via the extended switching matrix to the additional memory space (With a bigger and larger matrix size in the second stage, there will be more connections going through the matrix and ultimately required larger memory space as indicated by Fischer on page 1303, column 1, paragraph 1).

Regarding claim 7, Fischer disclosed a method for extending a switching matrix of a communication system without interruption, wherein the system split is performed by disconnecting half of the old switching matrix and replacing it with a new switching

Art Unit: 2667

matrix half, the cell streams being routed via a remaining half of the old switching matrix, wherein the disconnected half is then started up again using the new switching matrix, as a result of which one half of the switching matrix is operated using the new switching matrix half and the remaining half is operated using the old switching matrix, wherein the remaining half of the old switching matrix is then disconnected and replaced with another new switching matrix half via which the cell streams are routed, and wherein the remaining half is then started up again using the another new switching matrix (System split upgrade procedure was proposed. See page 1305, column 2, and lines 21-37).

Regarding claim 8, Fischer disclosed a method for extending a switching matrix of a communication system without interruption, wherein, in input-side interface devices, the cell header of each ATM cell has an internal cell header placed in front of it which is used to hold the routing addresses and is removed again in output side interface devices (See page 1304, column 2, lines 21-23).

Regarding claim 9, Fischer disclosed a method for extending a switching matrix of a communication system without interruption, wherein, in input-side interface devices, arriving cell streams are split into two separate and identical cell streams such that a first cell stream is routed via one half of the switching matrix and a second cell stream is routed via the remaining half of the switching matrix to the same output-side interface devices as stipulated by the routing address placed in front of the cell header (Incoming cells are split into halves before entering the switching matrix. See page 1304, column 1, paragraph 4; page 1305, column 2, lines 29-37).

Art Unit: 2667

Regarding claim 10, Fischer disclosed a method for extending a switching matrix of a communication system without interruption, wherein the additional memory space is reserved for the largest required switching matrix extension both in the header translation table and in the cell header of each ATM cell (Fischer stated that the second stage when used for upgrade need to be used in according with the maximum planned configuration of the switching system. With a bigger and larger matrix size in the second stage, there will be more connections going through the matrix and ultimately required larger memory space as indicated by Fischer on page 1303, column 1, and paragraph 1. See also page 1305, column 2, and paragraph 1).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Sharat C. Prasad (U.S. 6,049,542), Scalable multistage inter-connection network architecture and method for performing in service upgrade thereof.
- b. Ernst Heinrich Goeldner (U.S. 5,325,089), Two stage. At least doubled ATM reversing switching network having (2N X 2N) switching matrixes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Q. Le whose telephone number is 571-272-2246.

The examiner can normally be reached on 8 AM -5 PM.

Art Unit: 2667

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

vi

  
RICKY NGO  
PRIMARY EXAMINER